

Diatom 1: 32-39 (英文)

福島 博・寺尾公子・小林艶子 : *Navicula bryophila* Boye-Petersen の形態変異

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#### Abstract

The micrographs in this report are from diatom material taken from the pond in Shiroganedai, Tokyo. Valve elliptical with parallel to slightly convex sides; ends capitate to rostrate. From the various degree of protrusion ends, it would be better to consider *Navicula bryophila* var. *capitata* to the synonym of the nominate variety. When this species reduces its size, the shape becomes simple since smaller individuals often take weakly protruded ends.

Axial area narrow, lineate. Central area slightly wider than the axial area usually. Striae radiate, convergent at the ends and alternately longer and shorter at the center of the valve. Length, 12.5-23.0  $\mu\text{m}$  and the mode is 18 and 19  $\mu\text{m}$  which coincide with the range 10-25  $\mu\text{m}$  reported already. Breadth, 4-5  $\mu\text{m}$  and the mode is 4.5  $\mu\text{m}$  which show no difference previously reported range 2.5-5.0  $\mu\text{m}$ . Striae, 29-32 in 10  $\mu\text{m}$  with the mode of 28 in 10  $\mu\text{m}$  which is in accord with the range 20-40 reported until now. The striae at the both ends are denser than those about the central area. We observed many individuals with triundulate margins of valves. Other morphological characteristics of these individuals were almost the same as *Navicula bryophila*. Length, 12.5-18.0  $\mu\text{m}$ , and the mode is 16 and 17  $\mu\text{m}$ . Breadth, 3-4  $\mu\text{m}$  and mode is 3.3  $\mu\text{m}$ . Striae, 28-32 in 10  $\mu\text{m}$  and the mode is 30. So, the valves with triundulate margins are smaller than those of *Navicula bryophila*.

This type was first illustrated by Kobayasi (1960) and later related to *Navicula bryophila* by Ando (1979). Though this species is somewhat similar to *N.rautenbachiae* Cholnoky, it is distinguished by the narrower breadth and the coarser striae at the central area than those at both ends. In our observation it is better to distinguish this type from *N. bryophila*.

Key index words

Pennatae, *Navicula bryophila*, morphological variability, photomicrographs.